Jurnal Lahan Suboptimal : Journal of Suboptimal Lands
ISSN: 2252-6188 (Print), ISSN: 2302-3015 (Online, www.jlsuboptimal.unsri.ac.id)
Vol. 10, No.2: 202−213 Oktober 2021
DOI: 10.36706/JLSO.10.2.2021.530

Development Model of Food Crop in Suboptimal Area Based on Farmers Corporation in Ogan Ilir Regency, South Sumatra

Model Pengembangan Kawasan Tanaman Pangan pada Area Lahan Suboptimal Berbasis Korporasi Petani di Kabupaten Ogan Ilir Sumatera Selatan

Riswani Riswani[1*)], Yunita Yunita[1], Henny Malini[1], Thirtawati Thirtawati[1]

[1]Faculty of Agriculture, Universitas Sriwijaya, Indralaya, 30862, South Sumatra, Indonesia
[*)]Corresponding author: riswani@fp.unsri.ac.id

(Received: 5 February 2021, Accepted: 17 September 2021)

Citation: Riswani R, Yunita Y, Malini H, Thirtawati T. 2021. Development model of food crop in suboptimal area based on farmers corporation in Ogan Ilir regency, South Sumatra. *Jurnal Lahan Suboptimal : Journal of Suboptimal Lands*. 10 (2): 202−213. DOI: 10.36706/JLSO.10.2.2021.530.

ABSTRAK

Penelitian ini dilakukan berbasis pada kondisi pemenuhan kebutuhan pangan wilayah yang saat ini masih belum dilakukan dengan pola pengusahaan yang masih tersebar dan masih lemahnya pemberdayaan kelembagaan di tingkat petani, sehingga tidak efisien dalam pengusahaan khususnya pada lahan-lahan yang masih terkategori suboptimal. Berbasis pada kondisi tersebut maka tujuan penelitian ini adalah merumuskan model pengembangan kawasan pertanian tanaman pangan pada sera lahan suboptimal yang berorientasi pada koorporasi petani. Analisis masalah guna pencapaian tujuan dilakukan dengan menggunakan metode kualitatif namun tetap dilakukan penggunaaan rumus matematis yang relevan. Dari hasil analisis yang dilakukan dapat disusun program aplikatif untuk pengembangan kawasan pertanian berbasis korporasi petani di Kabupaten Ogan Ilir yang dibuat berdasarkan strategi pendekatan yang telah disusun, yaitu berbasis pada pendekatan politik, teknokratis, keterpaduan *top down policy-bottom up planning* dan partisipatif. Adapun kelompok program yang ditekomendasikan terbagi atas program optimalisasi ketersediaan input produksi, program pengembangan budidaya padi dan sarana prasarana pendukungnya, program pemberantasan hama dan penyakit tanaman padi, program perbaikan dan pemberdayaan lembaga tani, program perbaikan dan peningkatan pengetahuan dan keterampilan petani, program perbaikan panen dan pasca panen, program perbaikan pemasaran, program perbaikan infrastruktur penunjang, dan program pengembangan permodalan. Adapun lokasi pengembangan dan penerapan program difokuskan pada wilayah Kecamatan Muara Kuang, Pemulutan, Lubuk Keliat, Indralaya dan Pemulutan Selatan.

Kata kunci: kawasan, koorporasi petani, tanaman pangan

ABSTRACT

This research was conducted based on the condition of fulfilling the food needs of the region, which was currently not being carried out with the distribution pattern and weak institutional Strengtening at the farmer level, so that its utilization was not yet efficient in exploitation especially on suboptimal land. Based on this, the main objective of this study was to formulate a model for the development of food crop agricultural areas on

suboptimal land oriented to farmer corporations. This research used qualitative methods but the relevant mathematical formulas were still used. From the result of the analysis, an applicative program for the development of agricultural areas based on farmer corporation in Ogan Ilir Regency was compiled, which was based on a political, technocratic approach, integration of top down policy-bottom up planning and participatory. The recommended program group was divided into programs for optimizing the availability of production inputs, developing rice cultivation and supporting infrastructure, controlling pests and diseases of rice plants, improving and empowering farmer institutions, improving and increasing farmers' knowledge and skills, improving harvest and post-harvest, improving marketing, improvement of supporting infrastructure, and development of capital. The location for the development and implementation of the program was focused on the districts of Muara Kuang, Pemulutan, Lubuk Keliat, Indralaya and Pemulutan Selatan.

Keywords: farmer corporation, food crop area, food crop

INTRODUCTION

One of the challenges in agricultural development today is how to provide food needs, supply industrial raw materials and increase the export of agricultural commodities, particularly in strategic commodity groups and regional superiority, such as food crops. According Iyan (2014) and Octavia et al. (2015), one of the superior crops in South Sumatra is food crops. In order to answer these challenges, as well as increase agricultural production in food crop commodities, agricultural development on food crops on an economic scale must be carried out through regional planning in the field of food crops in a comprehensive and integrated manner in line with governance in the era of regional autonomy. For this reason, Muara Enim Regency Investment Service and One Stop Integrated Services (2018) explain that agricultural development policies, especially food crops, are needed which are in line with regional development principles. The Ministry of Agriculture (2018) answer this challenge by issuing a policy to guide the development of agriculture in which one of them is to crop the regional pattern, called the crop area.

Regulation of the Minister of Agriculture of the Republic of Indonesia No. 18/2018, define food crop areas as a combination of food crop centers that meet the minimum economic scale of exploitation and the effectiveness of regional development management in a sustainable manner and are functionally related in terms of natural resource potential, socio-cultural conditions, production factors and the existence of supporting infrastructure. The current implementation of agricultural area development must be based on farmer corporations, and Arifien et al. (2012) and Suryani et al. (2020), said that types of plants that can be developed by farmers in their corporations are food plants.

According to Faizah and Eko (2013) in the formation and development of agricultural areas based on farmer corporations, including the formation and development of food crop areas, an implementative plan is needed which can only be formulated through research and field studies, so that this plan can be used as an operational reference at the level.

Field in implementing programs and activities for the development of Corporate-Based Food Crops in a directed, focused, gradual and sustainable manner. The position of the farmer corporation as the driving force of the regional economy is the main key to success in realizing advanced, independent, and modern Indonesian agriculture (Gultom et al., 2020). Ogan Ilir Regency, South Sumatra has relatively high potential in the field of food crop development and is dominated by suboptimal land About 65% of area in Ogan Ilir is sub optimal land (BPS Ogan Ilir, 2020). Under these conditions, it is

appropriate to optimize the potential of existing food plant resources, especially in suboptimal lands, which are still widely distributed in this area, so that they can contribute more in the effort to increase the economic growth of the region and the welfare of the people, especially farmers. According Prayoga (2016) and Rahmi et al. (2015), suboptimal land is potential land for optimization of food crops.

Ratmini and Herwenita (2014), said that suboptimal land is one of the agroecosystems in South Sumatra which has the opportunity for agricultural development. With regard to these objectives as well as government directives set out in the Regulation of the Minister of Agriculture of the Republic of Indonesia No. 18/Permentan/RC.040/4/2018 in Central Bureau of Statistics of South Sumatra Province (2020), where to accelerate food self-sufficiency and grow farmer economic institutions, as well as to accelerate the implementation of agricultural development, it is necessary to conduct research on the development of food crop areas based on farmer corporations in areas with agricultural potential such as in the district Ogan Ilir. The direction of development must be in the form of a food crop area because in the marketing of agricultural products, especially food crops, the majority of entrepreneurs/buyers need products with large quantities, similar quality and continuity.

This condition can only be supplied from farmers who are in a coordinated food crop area. This is because in one area, agro-climatically and agrosystems will be relatively similar in quality and quantity (Laili & Herman, 2018). Based on these conditions, this study aimed to (1) identify food crop commodities in Ogan Ilir Regency that have the potential to be developed with a farmer-based agricultural area development pattern; (2) mapping the food crop commodity and its development area with the concept of developing a food crop area based on a corporation in Ogan Ilir Regency, and (3) formulating a food crop area development model based on farmers' corporations through formulating programs and activities that must be carried out in the development of food crop area based on farmer corporation in Ogan Ilir Regency

MATERIALS AND METHODS

This study used a descriptive analytical design in the form of a survey method that aims to describe the existing conditions in detail and project future potential through analysis of the various variables to be tested. Survey research could provide a deeper picture of certain social symptoms or certain aspects of life in the community being studied and could clearly reveal the relationship between various social phenomena. The sample in this study was drawn using the Disproportionate Stratified Random Sampling method with the stratification of member and non-member farmers from farmer groups as many as 30 people in each layer in the two sub-districts selected as the main rice producer in Ogan Ilir Regency. Thus, a sample size will be obtained representing the district as many as 120 rice farmers;

The data collected were in this study were primary data obtained by means of direct observation and interviews with sample farmers using a questionnaire that has been prepared, and secondary data obtained from related agencies and from various literature sources related to this research. The data analysis method used were (i) Delphi analysis to obtain the factors causing the underdevelopment of food crop agricultural areas, (ii) cluster analysis to classify agricultural areas into several clusters based on factors that cause food crop agricultural areas to be less developed, (iii) triangulation analysis to formulate directions for the development of food crop agricultural areas in Ogan Ilir Regency. The data obtained in the field were then grouped using structured tabulation techniques and then analyzed.

The analysis was carried out based on data analysis techniques according to Sugiyono (2019), namely data reduction, data presentation, and conclusion/verification and recommendation formulation. Data analysis techniques used in this study included recapitulation of interview transcripts, data reduction, data analysis, data interpretation and triangulation. From the results of the data analysis, conclusions and recommendations could be drawn. Determination of the location for determining the location of the area was based on the criteria for determining the area stipulated in the Indonesian Minister of Agriculture Regulation No.18/Permentan/RC.040/2018 concerning guidelines for developing agricultural areas based on farmer corporations. Furthermore, the processed data was interpreted systematically, then discussed in a descriptive, structured and systematic manner. The results of the analysis and discussion were used to formulate a development model in the form of programs and activities that must be carried out in the development of a corporate-based food crop area in Ogan Ilir Regency, as well as its implementation management.

RESULTS

Determination of Leading Food Commodities and Location of Area Development

From the application of the Delphi method and regional suitability analysis based on the regional criteria guidelines from the Indonesian Ministry of Agriculture No.18/Permentan/RC.040/2018 based on Figure 1, it was determined that the superior commodities and development areas were presented in (Table 1).

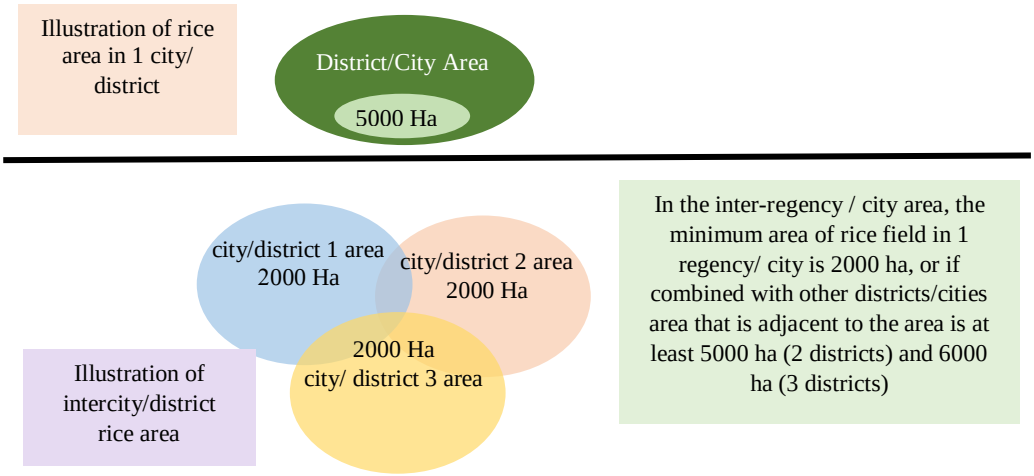

Figure 1. Illustration of determination of rice area location

Table 1. The type of determination of food commodities and development areas is based on the results of the Delphi method and area analysis

Type of Commodity	Location	Priority Village Area (Ha)	Area (Ha)
Rice	1. Muara Kuang	Seri Kembang, Tanabang Ulu, Sripadu, Suka Cinta, Kelampadu, Tanabang Ilir, Nagasari, Sukajadi.	11.846
	2. Pemulutan	Palu, Aurstanding, Pemulutan Ulu, Lebung Jangkar, Pelabuhan Dalam	11.014
	3. Lubuk Keliat	Lubuk Keliat, Ulak Kembahang, Embacang, Kasih Raja, Talang Tengah Laut	6.125
	4. Indralaya	Tunas Aur, Muara Penimbung Ilir, Muara Penimbung Ulu, Ulak Bedil, Sudi Mampir	6.076
	5. Pemulutan Selatan	Ulak Aur Standing, Kapuk, Segayam, Pematang Bungur, Maju Jaya	4.648

Regional Development Model through Determination of Programs and Action Plans

From the results of data analysis based on problems and regional conditions, as well as the application of the Delphi method, a development model is formulated through the formulation of programs and activities that must be carried out which consist of 9 main programs. The first program was optimizing the availability of production inputs, with the form of action plans and output indicators (Table 2). The second programs and activities that were recommended to be carried out for the development of a rice area based on a farmer corporation in Ogan Ilir Regency was Development of Rice Cultivation and Supporting Facilities (Table 3). The development of a rice area based on a farmer corporation in Ogan Ilir Regency of course also have to pay attention Eradication of pests and diseases of rice (Table 4). Improvement and empowerment of farmer institutions were things that must also be considered in the development of a rice area based on a farmer corporation (Table 5).

Table 2. Optimizing the availability of production inputs

Action Plan Activities	Indicator	
	Output	Outcome
Distribution of subsidized fertilizers in the right quantity, quality, on time & on price through the involvement of related institution & farmer institutions	Subsidized rice fertilizer assistance to farmer groups according to RDKK	Increase the quantity and quality of production from the use of fertilizers
Increase the involvement of the district-level Fertilizer and Pesticide Supervisory Commission (KP3) and extension officers in monitoring and reporting the distribution of subsidized fertilizers.	Subsidized rice fertilizer assistance to farmer groups according to RDKK	Increase the quantity and quality of production from the use of fertilizers
Training in making organic fertilizer based on local resources	Training on making organic fertilizers	Reduced production costs for farmers
Providing assistance for integrated organic fertilizer application packages	Integrated organic fertilizer application package assistance	Reduced production costs for farmers & increased the quantity & quality
Provision of soil processing machines, rice transplanter and combine harvester as needed	Alsintan assistance according to the needs of each rice plant area	Reduced production costs, efficiency & increased quantity & quality
Facilitating the procurement of agricultural production equipment through the empowerment of CSR funds	Alsintan assistance from the company's CSR funds	Reduced production costs, efficiency, & increased quantity & quality
Providing certified superior inbred rice seeds	Package of certified superior hybrid rice seeds in each area	Increasing the quantity & quality of production from the use of superior seeds
Providing certified superior hybrid rice seeds	Package of certified superior hybrid rice seeds in each area	Increasing the quantity and quality of production
Provision of organic rice seeds	Package of organic rice seed in each area	Increasing the quantity and quality of production
	Establishing village that produces its own seeds	Availability of local seed production
Establishment and development of villages that produce their own seeds	Technology transfer collaboration with universities	Increasing the quantity & quality of rice production
Making demonstration plots for superior variety seed technology testing as a result of university research on various ecosystems	Technology test demonstration plot	Increasing the quantity & quality of rice production
Development of a landless rice cultivation system	The demonstration plot of landless rice cultivation	Increasing the quantity and quality of production
Increasing the number of seed breeders	Seed breders	Availability of local seed production

Improvement and empowerment of farmer institutions could affect the level of knowledge and skills of farmers. Table 6 showed programs related to efforts to improve skills and knowledge of farmers. In this case, the action plan activities involve parties that were directly involved in increasing the knowledge of farmers, such as extension workers, farmer group associations, to banking institutions as providers of capital.

Harvest and post-harvest improvements and marketing action plan activities could be seen in Table 7 and 8. The development of a rice area based on a farmer corporation in Ogan Ilir Regency was difficult to achieve without supported by infrastructure development and capital development. Pantouw et al. (2018) explained that infrastructure was indispensable in regional development. Table 9 presented the action plan activities in infrastructure development.

The cooperation between farmer groups and banks or other capital institutions was very important, because the availability of capital was often a major problem for farmers in carrying out their farming. Table 10 showed the action plan activities in capital development.

Table 3. Development of rice cultivation and supporting facilities

Action Plan Activities	Indicator	
	Output	Outcome
Training on the application of GAP for rice in each area	Training activities in each area	Rice GAP application in farmer's land
Construction of embankments on tidal and lowland rice fields	Construction of embankments on tidal and lowlands as needed	Overcoming the problem of excess and lack of water in farmers' land
Repair and dredging of tertiary channels (micro water systems), especially in tidal areas	Dredging and cleaning of tertiary channels (micro water system)	Overcoming the problem of excess and lack of water in farmers' land
Assistance in making drilling wells and water pumps as needed	Assistance of drilling wells and water pumps in each area as needed	Overcoming the problem of excess and lack of water in farmers' land
Rehabilitation of water channels (irrigation networks) according to land types	Rehabilitation of water channels (irrigation networks) according to land type	Overcoming the problem of excess and lack of water in farmers' land
Construction and rehabilitation of floodgates	rehabilitation of floodgates	Overcoming the problem of excess and lack of water in farmers' land
Manufacture of a piping system	The piping system on water-deficient land	Overcoming the problem of excess and lack of water in farmers' land
Rotating water management training for members of farmer groups/P3A	Water management training for each group of water users	Overcoming the problem of excess and lack of water in farmers' land
Additional land area by means of paddy fields printing activities	Print the fields in each area	Increasing the quantity and quality of production
Repair and construction of farm roads (JUT)	Repair and construction of farm roads (JUT)	Production distribution becomes trouble-free and transportation costs are cheap
Development of floating rice cultivation	Floating rice cultivation demonstration plot	Increasing the quantity and quality of rice
Development of wetland rice cultivation technology based on submerged stress tolerant rice varieties	The demonstration plot for rice cultivation was tolerant of submerged stress	Increasing the quantity and quality of rice production
Providing dolomite assistance on acidic land categories	Dolomite assistance in each area as needed	Increasing the quantity and quality of rice production

Table 4. Eradication of pests and diseases of rice

Action Plan Activities	Indicator	
	Output	Outcome
Training on biological control of food crop pests based on indigenous entomopathogens	Biological control training in each area	Increasing the quantity and quality of rice production
Training on making organic pesticides (biopesticides) and providing biopesticide packages	Training on making organic pesticides in each area	Increasing the quantity and quality of rice production
Integrated pest eradication training	Integrated pest eradication training	Increasing the quantity & quality of rice production
Facilitate rat eradication (gropyokan) activities	rat eradication (gropyokan) activities	Increasing the quantity & quality of rice production

Table 5. Improvement and empowerment of farmer institutions

Action Plan Activities	Indicator	
	Output	Outcome
Training to improve management skills and group development in farmer institutions	Group management training	Farmer groups have professional management
Competitive assessment of farmer group activeness in the development of rice farming	Gapoktan Activity Competition	Increased group activity
Establishment of farmer cooperatives & Bumdes	Farmers' cooperatives and Bumdes	founded Bumdes
Fostering and empowering food barns	Active food barns	Achieving village food security
Giving awards for active farmer institutions	Award ceremony	Increased farmer motivation

Table 6. Increased knowledge and skills of farmers

Action Plan Activities	Indicator	
	Output	Outcome
Extension & training on rice farming according to GAP, pest & disease control, harvest management, downstream rice industry, access to market cooperation, capital management and access to capital, institutional management and finance, online marketing	training according to needs every month for each Extension Officer and area	Farmers in the area who have cultivation knowledge and skills according to GAP and good management skills
Participation of farmers in exhibitions, farmer gatherings, PENAS, apprenticeships and comparative studies	Exhibition activities, farmer gatherings, internships and comparative studies with groups in each area	Farmers in the area who have cultivation knowledge and skills according to GAP and management capabilities
provide food security award	Participation in the food security competition	Increased farmer motivation and insight

Table 7. Harvest and post-harvest improvements

Action Plan Activities	Indicator	
	Output	Outcome
providing rice drying equipment as needed	providing rice drying equipment	Increasing the quantity and quality of rice production
providing tarpaulin	providing tarpaulin	Increasing the quantity and quality of rice production
providing rice huller machine as needed	providing rice huller machine	Increasing the quantity and quality of rice production
Training to improve harvest systems and good post-harvest processing	Training to improve harvest systems and good post-harvest processing	Increasing the quantity and quality of rice production

Table 8. Marketing improvement

Action Plan Activities	Indicator	
	Output	Outcome
Implementation of rice quality standardization	Standardization of rice quality	Classification of rice in the market according to quality
Training on rice packaging and providing market-oriented rice packaging assistance	Rice packaging training and market-oriented rice packaging assistance	Production of local premium rice
Training in determining the standardization of rice	Rice standardization training	Classification of rice according to quality

Table 9. Supporting infrastructure improvements

Action Plan Activities	Indicator	
	Output	Outcome
Improvement of farm roads	Improve farming roads	Production distribution is operating well
Facilitating cooperation with transportation companies	Facilitating cooperation with transportation companies	Production distribution is operating well

Table 10. Capital development

Action Plan Activities	Indicator	
	Output	Outcome
Facilitating cooperation between farmer groups and banks or other capital institutions	The establishment of cooperation between farmer groups and banks	Farming scale development
Facilitating farmer land certification	The farmer's land has a certificate	Farmers are able to access capital from the Bank
Bankable rice farming management training	Bankable rice farming management training	Farmers are able to access capital from the Bank
Establishment of Bumdes/farmer corporations	Establishment of Bumdes/farmer corporation	Farming scale development

DISCUSSION

The results of the research are presented in Table 1 and Table 2 which are arranged in the form of agricultural programs and activities in the Design of Farmers Corporation-Based Food Crop Area Development Model in Ogan Ilir Regency. Agricultural programs and activities are arranged according to the nomenclature of programs and activities in the Ministry of Agriculture and in accordance with the objectives of regional development. To ensure consistency with the Master Plan at the provincial level, the program targets referred to in the program and action plan for the development of Farmers Corporation-Based Food Crops Area in Ogan Ilir Regency are the same as the national target for developing Food Crops Area Based on Farmers' Corporations. Ogan Ilir Regency, namely:

a. Increased production, productivity, added value and competitiveness of superior food crop commodities in Ogan Ilir Regency;
b. Availability of agricultural infrastructure and facilities in optimal food crop areas;
c. Application of location-specific innovative technology in food crop areas;
d. Increase the knowledge, skills and entrepreneurship of farmers in the management of farmer economic institutions; and
e. The functioning of the farming system as a whole, effectively and efficiently.

Based on these guidelines, the program formulated in the agricultural area development model based on farmer corporations in OI Regency as presented in Table 2 is a program that will be in line

with the South Sumatra Provincial Farmer Corporation-Based Agricultural Area Development Master Plan. According Ramdhani et al. (2015) and Winarso (2013), it is important to harmonize regional programs and central programs because they can help each other in implementation. The program is based on a strategic approach based on a political, technocratic approach, integrated top down policy-bottom up planning and participatory approaches.

The political approach is an approach to the vision and mission of the elected regional head as input in planning the development of food crop areas. Thus, the objectives and targets of national development through the establishment of food crop areas based on farmer corporations must be integrated and harmonized with the vision and mission of Bupati into policies and strategies for developing agricultural areas. According Prasetyo and Setyani (2020), farmer corporations must follow government rules in their activities. This approach primarily deals with the formal features of government and politics accentuates the study of the political institutions and structures. Therefore, the institutional approach is concerned with the study of the formal structures like legislature, executive, judiciary, political parties, and interest groups (Barnett & Finnemore, 2009) and one of the foremost implications of the the political approach is its focus on theoretical issues pertinent to the normative part of a decision-making (Pissourios, 2014).

The technocratic approach is a strategy of placing an action plan for the development of a corporate-based food crop area as a scientific planning instrument prepared using scientific methods and frameworks by Bappeda and regional agencies in this case the Ogan Ilir Regency Agriculture and Food Security Service as an operational elaboration of the Regional Medium Term Development Plan (RPJMD) and the Plan strategy from regional agencies (OPD) in the scope of agriculture in Ogan Ilir District.

The integrated top-down policy-bottom up planning approach is an approach by placing the Musrenbang coordination forum and other technical coordination forums carried out according to the levels of government starting from the village, sub-district and district/city levels as a forum for negotiation and consensus on the determination of regional development goals and targets. Pissourios (2014) said that the assigning of top-down and bottom-up approaches to discernible scales of planning helps the role of planning standards in each planning approach to become clear. As we saw above, regional and strategic urban planning should be ascribed to top-down approaches, while local urban planning that encompasses physical planning to bottom-up approaches.

The participatory approach is an approach strategy that states that the determination and selection of types and volumes of activities are adjusted to the needs, problems and aspirations of farmers as business actors, and that financing and area development are encouraged to increase community self-sufficiency. In this case, it is hoped that farmers' participation in every activity can be empowered and enhanced in the form of economic institutions.

Thus the programs compiled are indeed based on the problems and needs of farmers, and in line with political and technocratic interests, so that when operations can run optimally through rational budget support/and cross-agency involvement through competent human resources. Then besides that, Effendy and Mustofa (2020) said that programs for farmers have to consists a strategy for developing of Farmer Group.

Based on these four approaches and the problems that occur in the location of the plantation area, the District Government of Ogan Ilir has formulated program targets and activities for the development of food crop areas based on farmer corporations in

the designated areas. This is stated in the Master Plan for Agricultural Area Development in South Sumatra Province, and is directed nationally based on Kepmentan No: 45/Kpts/PD.200/1/2015, as well as the suitability of survey results and research studies with the types of food plant commodities to be developed in Ogan Ilir Regency, namely rice with applicable programs and activities that are presented in Table 2. Recommendations for the implementation of activities are compiled on an annual basis by considering aspects of production and operation management which in the agribusiness system include the stages of pre-production, production, post-harvest, processing and marketing. However, in its operational implementation, time planning in commodity development plans based on areas with aggregates and linkages between activities in a wide area must be carefully prepared by taking into account climatic conditions (especially the rainy and dry seasons), planting and harvesting times according to plant types, provision seeds, marketing patterns (price fluctuations) and other influencing aspects, including the pattern of budget disbursement for procurement activities sourced from the government budget Overall, the implementation of these programs and activities is planned to begin in 2021 with a priority on activities that become the basis for implementing subsequent activities. The initial activities are prioritized for non-physical activities, so that when physical activities take place, their implementation is supported by a strong foundation.

In the implementation of the program, the work unit which is expected to function as the person in charge of the implementation of activities or which is expected to act as a supporting agency that supports the implementation of activities is adjusted to the main tasks and functions of each. However, with regard to the required supporting activities, their existence must be guaranteed, the Regional Development Planning Agency (Bappeda) and work units that are expected to play a role must be involved early in the process of preparing the Action Plan.

The main work unit in implementing this action plan is the Department of Agriculture and Food Security of Ogan Ilir Regency as the OPD which holds the main tasks and functions in developing food crops and horticulture in Ogan Ilir Regency. However, in implementing programs that are related to the main tasks and functions of other OPDs, the work unit for implementing activities will coordinate and cooperate with other OPDs such as:

1. For programs that are coordinated with OPD and other regions, the work unit/ Satker will involve Bappeda Ogan Ilir Regency.
2. For programs related to infrastructure procurement/repair, the work unit/ Satker is the Public Works Agency.
3. Programs related to improving the quality of human resources, as a work unit/Satker it will involve universities and OPD who oversees the extension officer/PPL
4. Programs related to the implementation of research results, as a work unit/ Satker it will involve universities and the Regional Research and Development Center/Balitbangda.
5. Programs related to product marketing, as a work unit/Satker it will involve the Industry and Trade Office and so on.

Principles of the financial plan for activities to be facilitated by the government budget are compiled in a 5-year medium term, detailed according to financing sources, namely APBN, Provincial APBD and Regency APBD. A fundamental aspect that must be considered is the discipline of governance, so that the financing of activities must be prepared by considering the map of authority at government levels as well as the disciplines of the principles of concentration, deconcentration, Task and decentralization (DAU/DAK).

In relation to the limited government and regional government budgets to support the

acceleration of the development of food crop areas, the preparation of a budget plan must include aspects of self-reliance of the farming community and the participation of the business sector. The preparation of the budget scenarios should be prepared using the scenario that most rational and optimal considering the ability of the government budget, both state and local budgets. A fundamental aspect that must also be considered is the discipline of governance, so that the activity financing plan must be prepared by considering the map of authority and affairs at each level of government as well as the disciplinary principles of financing the Concentration Fund, Deconcentration Fund, Co-Administration Fund and Decentralization Fund. The preparation of activity financing plans is carried out in a directed manner according to the priority scale. Thus, the activity financing plan to be carried out is focused on critical factors that can accelerate the development of agricultural areas and is prioritized on increasing the role of government in agricultural development, namely: (1) providing facilities and infrastructure that the community cannot build independently and is not in demand by the private sector; (2) efforts to overcome failure in marketing of products produced by farmers; and (3) enhancing the human resource capacity of farmers and encouraging the functioning of government development institutions.

CONCLUSION

The food commodity with the most potential to be developed in a food crop area pattern based on farmer corporations on sub-optimal land in Ogan Ilir Regency is lowland rice. This commodity fulfills all elements of development support including land area, land conditions, availability of human resources, availability of supporting infrastructure and market potential. The rice development areas recommended for the development of corporate-based food crop areas in Ogan Ilir Regency are Muara Kuang Area, Pemulutan Area, Lubuk Keliat Area, Indralaya Area, and South Pemulutan Area. The model for developing a food crop area based on a farmer association built through the preparation of programs and activities in Ogan Ilir Regency is divided into programs to optimize the availability of production inputs, development programs for rice cultivation and supporting facilities, programs for eradicating pests and diseases of rice plants, programs for improvement and empowerment of farmer institutions, improvement programs and increase in farmers' knowledge and skills, harvest and post-harvest improvement programs, marketing improvement programs, supporting infrastructure improvement programs, and capital development programs.

ACKNOWLEDGMENT

The researchers would like to express their gratitude to the Faculty of Agriculture Sriwijaya University who has funded this research and the Department of Agriculture and Food Security of Ogan Ilir Regency who have helped technically in the field.

REFERENCES

Arifien M, Fafurida V, Noekent. 2012. Development planning based on food crop agriculture in efforts to overcome poverty problems. *Jurnal Ekonomi Pembangunan.* 13 (2): 288−302.

Central Bureau of Statistics of South Sumatra Province. 2020. South Sumatra in Figures of 2020. Central Statistics Agency of South Sumatra Province.

Effendy L, Mustofa R. 2020. Farmers 'institutional development models towards farmers' economic institutions in Sindangkasih Ciamis district. *Jurnal Ekonomi Pembangunan.* 6 (1): 38−47.

Faizah AA, Eko BS. 2013. Directions for the development of food crops agricultural areas in Sampang regency. *Jurnal Teknik Pomits*. 2 (2). DOI: 10.12962/j23373539.v2i2.3926.

Gultom IA, Ayu KP, Yanuarius YD, Achmad S. 2020. Corporate based agricultural sector planning analysis. *Jurnal Bisnis, Manajemen dan Sumberdaya Manusia*. 9 (2):1411−4186.

Iyan R. 2014. Analysis of the leading commodities of the agricultural sector in the Sumatra region. *Jurnal Sosial Ekonomi Pembangunan*. 4 (11).

Indonesian Ministry of Agriculture. 2018. Guidelines for the development of farmers' corporations-based agricultural areas. Ministry of Agriculture of the Republic of Indonesia, Jakarta.

Laili EF, Herman CD. 2018. Development of food crop based agricultural areas in Wuluhan district, Jember regency. *Journal of Regional and Rural Development Planning*. 2 (3): 209−217. DOI: 10.29244/jp2wd.2018.2.3.209-217.

Muara Enim Regency Investment Service and One Stop Integrated Services. 2018. Study on the Leading Potential of Food Crops Sub-Sector. Muara Enim Regency Investment Service and One Stop Integrated Services.

Octavia Z, Darwanto DH, Hartono S. 2015. Leading agricultural sector in South Sumatra. *Jurnal Agraris*. 1 (2). DOI: 10.18196/agr.129.

Pantouw CE, Poluan RJ, Octavianus H AR. 2018. Analysis of rurukan agropolitan area development in Tomohon. *Jurnal Spasial*. 5 (3).

Pissourios IA. 2014. Top-down and bottom-up urban and regional planning: towards a framework for the use of planning standards. *European Spatial Research And Policy*. 21. DOI: 110.2478/esrp-2014-0007.

Prayoga K. 2016. Peat land management based on local wisdom in Kalimantan island. *In: Prosiding Seminar Nasional Lahan Basah Tahun 2016.* Jilid 3: 1016-1022 ISBN 978-602-6483-40-9.

Prasetyo T, Setyani C. 2020. Development of Rice Farming Areas Based on Farmer Corporations in Central Java. *In: Proceedings of the National Seminar on the Readiness of Agricultural Resources and Location-Specific Innovations Entering the Industrial Era 4.0 T.*

Rahmi O, Robiyanto HS, Ari S. 2015. The integrated lowland management in Mulia Sari, Tanjung Lago subdistrict, Banyuasin regency. *Jurnal Ilmu Pertanian Indonesia (JIPI).* 20 (3). DOI: 10.18343/jipi.20.3.201

Ratmini S, Herwenita. 2014. Increasing income of rice farmers through integrated crop management approaches in Lebak land, Ogan Ilir regency, South Sumatra. *Jurnal Penelitian Universitas Jambi Seri Sains*. 16 (1): 45−52.

Ramdhani H, Soni AN, Muhammad F. 2015. Increasing farmer welfare with strengthening farmer groups development of rice farming areas based on farmer corporations in Central Java. *In: Proceedings of the National Seminar on the Readiness of Agricultural Resources and Location-Specific Innovations Entering the Industrial Era 4.0 T.* Prosiding Penelitian dan Pengabdian Kepada Masyarakat. 2 (3): (2015).

Sugiyono. 2019. Quantitative, qualitative and R & D research methods. Alfabeta, Jakarta.

Suryani S, Sitorus SRP, Sudadi U. 2020. Study on the development of commodity-based food crops agricultural land in Pinrang regency, South Sulawesi. Journal of the region and the environment study on the development of commodity-based food crops agricultural land in Pinrang regency, South Sulawesi. *Journal of the Region and the Environment*. 8 (2): 147−160. DOI: 10.14710/jwl.8.2.147-160.

Winarso B. 2013. Policy of development foodstuffs commodity support master plan program for acceleration and expansion of Indonesia's economic development (MP3EI) case studies in Gorontalo province. *Jurnal Penelitian Pertanian Terapan.* 13 (2): 85−102.